

8. The magnetic head of claim 1, wherein the low dielectric material has a thickness in a range of between about 1  $\mu\text{m}$  and about 100  $\mu\text{m}$ .

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EXHIBIT

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1 9. The magnetic head of claim 1, wherein the low dielectric material has a  
2 thickness in a range of between about 10  $\mu\text{m}$  and about 50  $\mu\text{m}$ .

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4 10. The magnetic head of claim 1, wherein the low dielectric material has a  
5 thickness of about 20  $\mu\text{m}$ .

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7 11. The magnetic head of claim 1, wherein the low dielectric material has a  
8 dielectric constant of less than about 9.

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10 12. The magnetic head of claim 1, wherein the low dielectric material has a  
11 dielectric constant of about 3.

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13 13. The magnetic head of claim 1, wherein the magnetic head carries a GMR  
14 sensor.

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16 14. The magnetic head of claim 1, wherein the low dielectric material provides  
17 a platform for the electrical contact pad.

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19 15. The magnetic head of claim 1, wherein an electrical contact pad having a  
20 surface area of less than about 20  $\mu\text{m}$  in order to reduce capacitance coupling with the  
21 substrate.  
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1 24. A magnetic head comprising:  
2 a substrate on which the magnetic head is formed;  
3 an alumina undercoat layer comprising SiO<sub>2</sub> formed over the substrate;  
4 an electrical contact pad; and  
5 a layer of alumina interposed between the electrical contact pad and the  
6 alumina undercoat layer.

7  
8 25. A method of reducing capacitance in a magnetic head, comprising:  
9 providing a substrate;  
10 providing a read/write head; and  
11 isolating the read/write head from the substrate in order to reduce the  
12 capacitance coupling between the read head and the substrate.  
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